

CLAIMS

I claim:

1. A method of operation for a computer coupled to a network, comprising:
receiving a form description program by the computer over the network;
executing the form description program on the computer to generate a form
having a state, the state depending on one or more application program variables
that are stored in at least one cookie during generation of the form;
changing an application program variable to a new application program variable;
and
refreshing the at least one cookie with the new application program variable to
update the state of the form.
2. The method of claim 1 wherein the at least one cookie stores the one or more
application program variables in a string on the computer.
3. The method of claim 1 further comprising:
generating a user interface from execution of the form description program;
and
selecting one or more templates from the user interface.
4. The method of claim 3 further comprising entering a name on a field of the one
or more templates.
5. The method of claim 1 further comprising entering data in the form.

6. The method of claim 1 further comprising:
transmitting the form over the network from the computer to a second computer; and
storing the form on the second computer.
7. The method of claim 6 wherein the one or more application program variables associated with the form are stored in a database table in the second computer.
8. The method of claim 7 wherein the state of the objects is maintained in the database table.
9. The method of claim 8 wherein state queries and interrogation between objects is conducted through the tables.
10. The method of claim 8 wherein software to hold the state of the objects can be any software component including the database table format and software containers.
11. The method of claim 10 further comprising holding application source code in the software component, the application source code accessible by the client through the network.
12. The method of claim 10 further comprising holding the operating system information, the operating system being accessible by the client through the network.

13. The method of claim 7 further comprising accessing the database table by a master controller to obtain state information associated with the objects.

14. The method of claim 7 further comprising transmitting state information associated with the objects to the database table.

15. The method of claim 14 further comprising:

issuing a request over the network by the computer; and

transmitting the form from the second computer to the computer in response to the request.

16. The method of claim 15 further comprising reconstructing the form on the computer.

17. The method of claim 1 wherein the computer receives the form description program from a hyper-text markup language ("HTML") page stored on a second computer.

18. The method of claim 1 wherein the computer is a client and the second computer is a server.

19. A computer data signal embodied in a transmission medium, comprising:
a code segment including instructions for transmitting to a client system a form description program containing application program variables;

a code segment including instructions for executing the form description program on the client system to generate a form, the application program variables being stored in cookies on the client system; and

a code segment including instructions for transmitting by the client system a version of the form with a new state that includes modified application program variables.

20. The computer data signal of claim 19 wherein the cookies store the application program variables in a string on the client system.

21. The computer data signal of claim 19 wherein execution of the form description program on the client system generates a user interface having templates.

22. The computer data signal of claim 19 wherein the modified application program variables are produced by storing information in one or more fields associated with the templates.

23. The computer data signal of claim 19 further comprising:
a code segment including instructions for receiving by a server system the new version of the form.

24. The computer data signal of claim 19 wherein the application state variables of the new version of the form are stored in a database table as objects on the server system.

25. The computer data signal of claim 19 further comprising:

a code segment including instructions for transmitting the new version of the form from the server system back to the client system.

26. The computer data signal of claim 19 wherein the client system receives the form description program from a hyper-text markup language ("HTML") page downloaded from a server system.

27. A computer program product comprising:

a computer useable medium and computer readable code embodied on the computer useable medium for causing a transfer of information initiated by a user, the computer readable code comprising:

computer readable program code devices configured to cause the computer to effect the transmitting of a form description program over a communication network to a client machine, execution of the form description program by the client machine generating a form having a state, the state depending on one or more application program variables that are stored in at least one cookie; and

computer readable program code devices configured to cause the computer to effect the receiving, over the communication network from the client machine, a version of the form having a new state that includes application program variables modified by the user.

28. The machine-readable storage medium of claim 27 wherein the at least one cookie stores the application program variables in a string on the client machine.

29. The machine-readable storage medium of claim 27 further comprising:
computer readable program code devices configured to cause the computer to store the modified application program variables in a database table as objects.

30. The machine-readable storage medium of claim 29 further comprising:
computer readable program code devices configured to cause the computer to effect the production of a master controller object to interrogate the database table, state information associated with the objects being transmitted to the database table so as to provide a distributed environment snapshot to the master controller object.

31. The machine-readable storage medium of claim 27 further comprising:
computer readable program code devices configured to cause the computer to effect the transmitting, over the communications network, of the form back to the client machine in response to a request from the user.

32. A computer-readable medium containing a data structure for storing a form, the data structure comprising:
a database table containing a set of application program variables associated with the form stored, the database table storing the set of application program variables as objects; and
a master controller object to interrogate the database table, state information associated with the objects being transmitted to the database table so as to provide a distributed environment snapshot to the master controller object.

33. A method of operation for a computer coupled to a network, comprising:
retaining application states in cookies on a client;
transmitting the application states from the client to the computer over the
network; and
storing the states in database tables or software containers on the computer.

34. The method of claim 33 further comprising using an array holder to store the
application states.

35. The method of claim 34 wherein the array is accessible using scripting
languages on the client.

36. The method of claim 34 further comprising sending data collection from the
computer to the client over the network using the array, the array enabling the client
to handle the data collection without repeated requests to the client.